Remarks

Claims 1-17 are pending in this application.

Response to Rejection of Claims under 35 U.S.C. §103

Claim 1

Applicants respectfully request reconsideration of the rejection of claim 1 under 35 USC §103 as being obvious in view of the combination of WO 99/59907 (O'Connor) and U.S. 2,428,097 (Roslund).

Personal care absorbent articles such as disposable diapers, training pants, other infant care products, other child care products, feminine napkins, panty liners, interlabial pads, other feminine care products, incontinence articles, and other adult care products are typically manufactured using high-speed processing machines which convert a stabilized web or ribbon of a fibrous absorbent material into an article. To prevent interruption of the processing machine when the material in one roll is exhausted, a trailing end of each coil is spliced to a leading end of the next coil. The resulting interconnected web has essentially a continuous length and the splice has a sufficient tensile strength so that it may be provided to the machine and processed without breaking at the splice.

One drawback to conventional splicing techniques is that the splice is not fluid permeable and therefore unusable in an article. In the past, fibrous absorbent materials have been joined by an adhesive or, since they do not have smooth surfaces which readily hold an adhesive, by an adhesive tape. Adhesives and tape are substantially impermeable to fluid. As a result, it is necessary to cull all spliced regions of the absorbent material, or to cull all articles that may incorporate a portion of a spliced region, in order to remove all adhesive or tape.

Claim 1 is directed to a personal care absorbent article having a spliced absorbent material. The article comprises:

a fluid permeable body side liner for placement adjacent a wearer; and

an absorbent core attached to the body side liner for absorbing fluid passing through the liner, said absorbent core including:

a first portion of absorbent material;

a second portion of absorbent material; and

a piece of splicing material directly attached to said first and second portions of absorbent material, said splicing material having a fluid permeability at least about 25% as great as a fluid permeability of said first portion of absorbent material and at least about 25% as great as said second portion of absorbent material.

Claim 1 is submitted to be patentable over O'Connor in view of Roslund in that the cited references, whether considered alone or in combination, fail teach or suggest a piece of splicing material having a fluid permeability at least about 25% as great as a fluid permeability of the first portion of absorbent material and at least about 25% as great as the second portion of absorbent material.

O'Connor discloses a strip of material with splices, wherein the material may be an absorbent material. With particular reference to Fig. 1, the trailing end of one strip (19) is spliced to the leading end of another strip (20) by stitching the ends together with yarn (21). O'Connor discloses the use of yarn (21) as a splicing material but fail to teach the material construction of the yarn or the permeability thereof relative to the permeability of the strips. Thus, O'Connor fails to teach a splicing material having a fluid

permeability at least about 25% as great as a fluid permeability of either strip (19, 20).

Roslund discloses a method of splicing the ends of a single-piece of drier felt together to form a closed looped fabric. In particular, opposite ends a, b (Figs. 3 and 4) of the drier felt are placed in overlapping relation with a cement strip 10 interposed between the overlapping ends of the felt. Column 4, lines 16-19, claims 1, 2, 3, and 6, and Fig. 3 of Roslund. According to Roslund, solvent and pressure are applied to the overlapping ends of the felt "to soften the cement and cause the same to flow, entering the fabric of the felt ends for a distance adjacent the opposing surfaces thereof." Column 4, lines 29-47. Once the cement re-hardens, a firm bond is established thereby forming the closed looped fabric.

Nowhere does Roslund disclose that the cement strip has a fluid permeability at least about 25% as great as a fluid permeability of the drier felt. In fact, it is clear that the cement of Roslund is impermeable. See, e.g., column 3 lines 51-55 and 68-70. At column 3, lines 62-68, Roslund expressly recognizes that the cement strip reduces the porosity (and therefore the fluid permeability) of the fabric. Thus, to provide some fluid flow through the impermeable cement, Roslund further discloses that recurrent openings 11 (Fig. 1) or 11' (Fig. 2) are provided in the cement strip prior to softening of the cement. See column 3, line 71-column 4, line 2. The cement strip is softened by a solvent and the softened cement flows into the pores of the fabric due to pressure applied to the fabric by a suitable pressure member. See column 4, lines 16-47. Roslund notes that the size of the openings in the cement strip decrease upon softening of the strip, such as up to 25%. Thus, the openings are made large enough so that they don't

completely close upon softening of the cement. Column 4, lines 48-65. The obvious reason for doing so is that if the openings completely close, no fluid can flow down through the thickness of the spliced regions.

As set forth by Roslund at column 4, lines 5-15, following bonding of the fabric by the cement strip with openings, the bonded areas of the fabric will have interspersed therethrough areas where the fabric is not bonded and through which fluid can readily penetrate. It is implicit, then, that the areas in which the fabric is bonded are liquid impermeable, i.e., fluid cannot penetrate through those areas in which the cement is present. As can be seen in Figs. 1 and 2 of Roslund, the cement area of the strip is significantly greater than the combined area of the openings therein, and as Roslund discloses, the size of the openings decreases further upon softening. Thus, the openings are even smaller than they are shown in Figs. 1 and 2 once the cement is used to bond the overlapping ends of the drier felt together (e.g., Fig. 5). Nowhere does Roslund indicate that the fluid permeability through the cement strip is at least about 25% as great as the fluid permeability of either of the overlapping ends of the drier felt.

As a result, Roslund fails to teach that the cement strip has a fluid permeability at least about 25% as great as a fluid permeability of the first portion of absorbent material and at least about 25% as great as the second portion of absorbent material as recited in claim 1.

It appears that the Office action takes the position that Roslund inherently discloses that the cement strip has a fluid permeability that is at least about as great as the felt fabric. See page 3 of the Office action. Respectfully, this is not so. Nowhere does Roslund assert or suggest that the fluid

permeability of the cement strip is as great as the fluid permeability of the felt or even 25% as great as the felt. In fact, Roslund recognizes that the cement strip significantly adversely affects the flow characteristics of the felt fabric. See, e.g., column 3, lines 63-70. The openings in the cement strip can only compensate so much for the fluid impermeability of the cement.

To establish inherency, the prior art "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." M.P.E.P. §2112 citing *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Roslund fails to teach, explicitly or inherently, that the piece of splicing material (i.e., the cement strip 10) has a fluid permeability of at least about 25% as great as a fluid permeability of the first portion of absorbent material (i.e., the fabric portion a) and at least about 25% as great as a fluid permeability of the second portion of absorbent material (i.e., the fabric portion b).

Since O'Connor and Roslund fail individually to teach or suggest a piece of splicing material having a fluid permeability at least about 25% as great as a fluid permeability of the first portion of absorbent material and at least about 25% as great as the second portion of absorbent material, a combination of these references also fails to teach or suggest such a feature.

Moreover, O'Connor teaches away from extending a splicing material over a majority of the length of the aligned junction, i.e., O'Connor teaches the importance of leaving a substantial

portion of the strips uncovered at the seam therebetween. Thus, one skilled in the art would not be motivated by Roslund et al. or any other reference to provide a splicing material that extends continuously over a majority of the length of the aligned junction between two strips because doing so would do express violence to the teachings of O'Connor.

For these reasons, claim 1 is submitted to be nonobvious and patentable over the references of record.

Claims 2-17, depending directly or indirectly from claim 1, are submitted to be nonobvious and patentable over the references of record for the same reasons as claim 1.

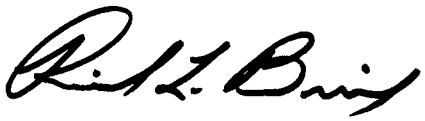
Claims 7 and 10

Claim 7, which depends from claim 6, recites that the piece of splicing material comprises a carded web of bicomponent fibers. Claim 10 recites the same feature but depends from claim 1. Claims 7 and 10 stand rejected as being obvious in view of the combination of O'Connor, Roslund, and U.S. Patent No. 2,495,761 (Platt). However, none of these references teach or suggest that the splicing material comprises a carded web of bicomponent fibers as recited in claims 7 and 10. As a result, claims 7 and 10 are submitted to be further patentable over the references of record for these additional reasons.

Conclusion

In view of the foregoing, favorable consideration and allowance of claims 1-17 is respectfully requested.

Respectfully submitted,



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